

**Improvement to source-antennas for transmitting/receiving  
electromagnetic waves**



**ABSTRACT**

The present invention relates to a source-antenna for transmitting/receiving electromagnetic waves comprising an array of  $n$  radiating elements ( $11_3, 11_4$ ) operating in a first frequency band, means (20) with longitudinal radiation operating in a second frequency band, the array and the means with longitudinal radiation having a substantially common phase centre, the  $n$  radiating elements being arranged symmetrically about the longitudinal-radiation means, and each element ( $11_3, 11_4$ ) of the array consisting of a radiating element of the travelling wave type.

Fig. 1